Introduction A significant proportion of lung cancer patients present as an emergency. This is associated with poor one year survival. Many of these patients have had contact with health services before presenting as an emergency. It is estimated that one in five lung cancer patients have an unplanned admission before their urgent clinic appointment. 1

Objective To reduce the number of emergency lung cancer admissions by providing an effective alternative ambulatory pathway for high risk patients.

Methods Patients referred on the two week wait pathway are vetted by the respiratory physicians. Those identified as having a high risk of admission are prioritised and reviewed urgently on the ambulatory care unit usually by the next working day. Patients with the following features were expedited:

1. Superior vena caval obstruction
2. Liver function abnormalities
3. Large tumour burden on chest radiograph
4. Severe symptoms such as pain and breathlessness
5. Large pleural effusion.

<table>
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<tr>
<th>Year</th>
<th>Incidence of lung cancer (total no. of admissions)</th>
<th>Length of stay</th>
<th>Total bed-days</th>
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<tbody>
<tr>
<td>Kettering</td>
<td>2012–13 195 108 (55%) 11.6 1253</td>
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<tr>
<td>General</td>
<td>2014–15 195 67 (34%) 8.1 543</td>
<td></td>
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<tr>
<td>Hospital</td>
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<tr>
<td>England</td>
<td>2012–13 33,231 18,878 (56%) 8.9 168,014</td>
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<tr>
<td>&amp; Wales</td>
<td>2014–15 30,765 17,281 (56%) 8.9 153,800</td>
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</table>

Patients with suspected lung cancer presenting to the emergency department were also re-directed to the ambulatory care unit whenever feasible. We evaluated the service for a period of 12 months from October 2014 and compared it with the 12 month period prior to the commissioning of the ambulatory care unit in June 2013. As part of the service, the team developed an innovative lung cancer diagnostic service utilising ultrasound guidance to facilitate early diagnosis.

Results Table 1 demonstrates the resulting drop in unplanned lung cancer admissions and length of stay. We estimate a cost saving of £170,000 based on a 710 bed-day reduction (£300/bed day) after taking into consideration physician time. If rolled out nationally, reducing the admission rate to 34% of the lung cancer incidence will avoid 6800 admissions (>55,000 bed-days) with significant cost savings and benefits to patients.

Conclusion Flexible pathways are cost effective and prevent emergency admission of lung cancer patients which is associated with high mortality. This novel approach is easily adoptable widely and would have a significant impact across NHS.

REFERENCE
Introduction and objectives We aimed to study quantitatively the lung cancer pathway from first symptom to treatment and to explore relationship between symptoms, delay and survival.

Methods Newly diagnosed lung cancer patients, referred to Oncology clinics in Norfolk 2008–2012, completed systematic questionnaires regarding date of onset of each symptom, MRC dyspnoea score and% weight loss. GP’s also completed questionnaires. Additional patient, pathway and tumour data were recovered from hospital records. The cancer pathway was recorded in five phases: 1) first symptom to GP presentation, 2) to secondary care (SC) referral, 3) to SC appointment, 4) to MDT meeting or date of diagnosis and 5) to treatment commencing.

Results Of 379 patients, mean age was 70.1 years, staging was: I-II (13.7%), III (34.3%) and IV (52%). Cohort survival was 6.1% with minimum follow-up of 39 months.

Mean phase lengths were 221.8, 45.8, 10.7, 21.3, 34.7 days for phases 1–5 respectively. Phase 1 was significantly longer (p < 0.01). Mean phase 1 was shorter in stage III-IV than I-II, 200 and 245 days respectively (p < 0.05), in ex/never-smokers (191.6 days) than smokers (264.2 days) (p = 0.022) and if first symptom was haemoptysis compared to cough or dyspnoea. 36.9% patients felt they delayed seeing their GP. Commonest reasons were: thinking symptoms were insignificant (35%), anxiety (28.6%) and denial (20%). Good correlation was seen between patient and GP reported dates.

Reported symptoms included (% initial symptoms in parenthesis): cough 71% (62.8%), dyspnoea 62.8% (27.2%), chest pain 37.7% (8.7%), haemoptysis 28% (4.2%).

Symptoms conferring increased hazard of death were defined as B symptoms. These were: grade 4/5 dyspnoea, hoarseness or loss of voice, metastatic pain and systemic symptoms (HRs 1.77, 1.53, 2.21, 1.93 respectively, p < 0.001). Patients with initial cough/mild dyspnoea have means of 127/210 days before B symptoms develop.

Overall no relation was found between phase lengths 1–4 and survival. Survival increased if phase 5 was >31 compared to ≤31 days (HR 0.74, p = 0.006).

Conclusions Phase 1 is longest. There is no relation between phase length and survival except in phase 5. Symptoms are more important to survival than delay. Effective therapy started within 3 months (before B symptoms) could increase survival.

P81 STRAIGHT TO CT DELIVERS EARLIER FIRST DEFINITIVE TREATMENT IN LUNG CANCER– EFFECT OF A SIMPLE INTERVENTION

P Malhotra, P Murphy, C Dawson, N Hunt, J Hendry, St Helens and Knowsley Teaching Hospitals NHS Trust, Prescot, UK

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Background The National Optimal Lung Cancer Pathway (NOLCP) recommends performing a CT scan before a patients first appointment in a rapid access suspected lung cancer clinic. A local audit in 2014 at our hospital which receives over 350 two week rule suspected lung cancer referrals per year found that less than 50% of patients had a CT scan before their first appointment.

Objective To determine the effect of a simple cue for physicians stamped on 2 week rule referral forms on the proportion of patients who have a CT scan before their first appointment in a rapid access suspected lung cancer clinic, and its effect on the time to definitive treatment.

Methods This was a retrospective analysis of the lung cancer clinic database at a large district general hospital. Two periods were audited: September – November 2014 (pre-intervention), and July – September 2015 (post-intervention). Data on demographic characteristics, date of first clinic, date of performance of CT scan, and time to definitive treatment was collected. From January 2016 onwards, a simple new intervention was put in place: all 2 week rule referrals were stamped with a cue (“Pre-clinic CT: Yes or No?”) for Consultants triaging the referral to prompt them to arrange a pre-clinic CT scan if appropriate. Re-audit was carried out during the period July–September 2015.

Results Seventy-six out of 81 two week rule referrals between September–November 2014 had a CT scan during their management pathway. Thirty-six (47%) of these scans were performed before the patients first appointment in clinic. Re-audit between July-September 2015 after introduction of the stamp revealed that 88 CT scans were performed on 101 two week referrals. Of these, 70 (80%) patients had a CT scan before their first appointment.

Time to first definitive treatment improved by 1 week from 38.7 days in the pre-intervention cohort, to 31.5 days in the post-intervention cohort.

Conclusion A simple cue stamped on 2 week rule referral forms increased the proportion of patients who had a CT scan before their first appointment in a rapid access suspected lung cancer clinic from 47% to 80%, and reduced the time to definitive treatment by 1 week.